EPA General Comments and Comments on Figures and Tables OU2 RIFS Workplan for South Dayton Dump and Landfill, dated September 2013

General comment

Include a short section similar to the 2006 RIFS Workplan Section 7 to address project organization, but also add a schedule of the expected RIFS tasks so the agencies will know what to expect. Name and provide an expected timeframe for each anticipated deliverable (e.g. are you planning one Phase 1A letter workplan, or a Phase 1A/B workplan, or media specific workplans; will there be a TM for the screening-level risk assessment or will they be separate for human health and eco; will there be a final RAO TM, data evaluation report(s), remedial technologies screening, etc.)

Figure 1.2: Add the label for Parcel 3275 to the figure.

Table 2.4: Correct the definition of ELCR to "excess lifetime cancer risk".

<u>Table 3.4</u>: The proposed transects for background sampling should be depicted as transects, indicating the number and approximate location of the samples in each transect.

DQO tables, general comments or all tables:

- DQO tables 3.1, 3.4, 3.5 and 3.6 are not clear as to which ESLs and which receptors are being evaluated.
- Provide some explanation (in Section 5.1 of the text?) of why steps 5-7 of the DQOs are missing and when those steps are going to be completed. Step 7 seems to be appropriate for inclusion in the letter workplans, except that sampling locations are already proposed.
- Review the tables for inconsistencies between the text and the tables regarding action levels, data needs, and phased work.

Table 3.1

- Step 2.iv.b, Phase 2: Five acres is used as an exposure area size, but EPA's standard for industrial/commercial property is ½ acre. Exposure areas should not combine multiple properties, which appears to be the case if 5 acres is used.
- Notes: Replace Mark Allen with Maddie Smith for the OEPA representative.

Table 3.2, Groundwater

- Clarify if any leachate/seep sampling will be conducted.
- Name Phase 1B "Comparison of Groundwater to Background"?
- Remove "if necessary" since a groundwater investigation is necessary at OU2.
- Step 1.iv, Phase 2: Add "dermal contact and inhalation" after "ingestion" since all 3 pathways must be included as part of a potable use scenario.
- Step 2.i, Phases 1A & 1B: Indicate that VISLs are applicable to groundwater (not soil).
- Step 2.ii and 2.iv, Phases1A & 1B: Indicate that VISLs are applicable to groundwater (not soil).
- Step 2.iv.a, Phase 2: Add the dermal pathway since all 3 pathways must be included.

Table 3.3 Soil Gas

- Step 1.iii: Soil or waste residuals in the vadose zone may volatilize and migrate to indoor air. This is depicted on figure B-2 and should be reiterated here for consistency.
- Step 2.iv.a, Phase 1: Add "current and future" before "onsite".
- Step 2.iv.a, Phase 2: Add "current and future" before "occupants".
- Step 3.i.2 states that subslab samples will be taken. SS samples are not described elsewhere (as far as I can see). If SS samples are necessary, then indoor and outdoor data are also necessary to evaluate the vapor intrusion pathway. If SS samples are contingent on whether they are indicated by other data, then this sentence is inconsistent.
- Step 3.iii: Clarify (elsewhere in the text is fine) how subslab soil vapor action levels will be calculated (i.e., what attenuation factor, what target risk and noncancer hazard index will be applied?)
- Step 4.i, Phase 2: Add "potential VOC-containing residues are present in the vadose zone or" before "concentrations".
- Step 4.ii, Phase 2: Add "VOC residues in the vadose zone or" before "concentrations"
- Step 4.v.a: replace "the soil, fill, and groundwater" with "soil gas" in two places.

Table 3.4 Surface Water

- Step 1.iv, Phases IA and 1C: Clarify if "discharges" refers to leachate or runoff.
- Step 1.v: If intermittent drainages are identified, how will they be sampled?
- Step 2.i, Phase 1A: Add "and ingestion of aquatic organisms" after "ingestion".
- Step 2.i, Phase 1C: Add "recreational users and anglers" after "trespassers".
- Step 3.iii, Phase 1A & 1C: Add National Recommended Water Quality Criteria for human health for protection of ingestion of water + organisms.
- Step 4.i: The text states that surface water samples may be adjusted based on intermittent drainage pathways; reiterate that here for consistency.

Table 3.5 Sediment

- Step 1.iv, Phase 1A-GMR and QP, and later steps: Provide a rationale for using industrial RSLs rather than residential RSLs.
- Step 4: Sediment samples should also be collected from areas more accessible to humans and with evidence of use (e.g., where anglers or other recreators are present; areas where water is approximately 3 ft deep and where sediment can support body weight).
- Step 4.i: The text states that sediment and samples may be adjusted based on intermittent drainage pathways; reiterate that here for consistency.

Table 3.6 Floodplain Soil

- Step 1.iv, Phase 1A: The statement "The goal is not to identify individual areas of contamination" is inconsistent with identifying hot spots, as indicated in Section 4.1 of the text. Add clarification to the last sentence that explains the discrepancy.
- Step 4.i, Phase 1A: Provide rationale for the statement "CRA has defined the exposure unit of the floodplain to be the bike path/recreational trail."

Appendix B, Table B-1:

• Add inhalation of vapors as a potential exposure route; what data will be used in the HHRA to address these exposures?

- Why are groundwater exposure pathways for residents, site workers, and temporary workers on OU2 Parcels (excluding Quarry Pond), temporary workers on offsite properties, and temporary workers on GMR/floodplain not identified with an "X"?
- Add inhalation as a potential exposure route for surface water as a tertiary source.
- Tables B-1 and B-2 appear to represent both current and potential future use, so why are there no exposure pathways identified with an "X" for residents on OU1 Parcels or OU2 Parcels (excluding Quarry Pond)? It can be noted that plans for placing an institutional control on certain properties limiting use to non-residential would eliminate the future potential of residential exposures.

Appendix B, Table B-2:

- Add inhalation of vapors as a potential exposure route wherever surface water and sediment are tertiary sources.
- Why are soil exposure pathways for recreational users and temporary workers in the GMR/Floodplain not identified with an "X"?
- Why are groundwater exposure pathways for site workers and temporary workers on OU2 Parcels (excluding Quarry Pond), temporary workers on offsite properties, and temporary workers on GMR/floodplain not identified with an "X"?

Appendix C:

- Add a note that RSLs are updated approximately two times per year, and comparisons to site and background concentrations will be made using the most recent RSLs.
- In addition to the screening values provided for individual PAH and PCB constituents, screening values also need to be provided for total low molecular weight (LMW), total high molecular weight (HMW) PAHs, and for total PCBs to evaluate the additive toxic effects. Total PCB screening levels need to be added to the surface water screening level table too.
- There should be a hierarchy of ecological soil screening levels. Suggested is:
 - o USEPA Ecological Soil Screening Levels (Eco-SSLs)
 - o USEPA Region 5 ESLs
 - Other sources (such as other USEPA region soil screening values, Preliminary Remediation Goals for Ecological Endpoints [Efroymson et al. 1997], and/or from literature)